

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL SEARCH REPORT**  
(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference FP20427	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. <b>PCT/AU2004/001304</b>	International filing date ( <i>day/month/year</i> ) <b>24 September 2004</b>	(Earliest) Priority Date ( <i>day/month/year</i> ) <b>26 September 2003</b>
<b>Applicant</b> SENSEI TRADING PROPRIETARY LIMITED et al		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**
  - a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
    - The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
  - b.  With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.
2.  Certain claims were found unsearchable (See Box No. II).
3.  Unity of invention is lacking (See Box No. III).
4. With regard to the title,
  - the text is approved as submitted by the applicant.
  - the text has been established by this Authority to read as follows:

#### **Adjustable Inlet Valve with Air Gap**

5. With regard to the abstract,
  - the text is approved as submitted by the applicant.
  - the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.
6. With regard to the drawings,
  - a. the figure of the drawings to be published with the abstract is Figure No. 1
    - as suggested by the applicant.
    - as selected by this Authority, because the applicant failed to suggest a figure.
    - as selected by this Authority, because this figure better characterizes the invention.
  - b.  none of the figures is to be published with the abstract.

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/AU2004/001304

**Box No. IV Text of the Abstract (Continuation of item 5 of the first sheet)**

A valve arrangement for use in the cistern (8) of a toilet is described having an inlet valve (20) operated by a float (46) such that when the level of water in the cistern reaches a threshold amount, the float operates the inlet valve to substantially instantaneously close the supply of incoming water. The inlet valve of the valve arrangement is provided with an air gap or clearance (51) to eliminate, prevent or reduce siphoning of water from the cistern into the water supply when the valve is in the fully closed position. The air gap allows water within the inlet valve to drain into the cistern so as to form the air gap.

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/AU2004/001304

## A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. 7: E03C 1/10, E03D 1/32, F16K 31/30

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPAT: 1. IPC E03C 1/10 & keywords: cistern, valve, and similar terms  
 2. IPC E03D 1/30, 1/32, E03F 7/04 & keywords: anti-siphon, pressure break, air gap and like terms  
 3. IPC F16K 31/- & keywords: anti-siphon, pressure break, air gap, float and like terms  
 4. Keywords: cistern, valve, float, anti-siphon, pressure break, air gap and like terms

ESP@CE: 1. E03C 1/10 & keyword float  
 2. Keywords: valve, float, snap, pivot

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3970101 A (Wilson) 20 July 1976 Especially figure 1, column 3, lines 13-27, 38-55	1-19, 21
X	US 2766769 A (Carnahan) 16 October 1956 Especially figure 1, column 3, lines 51-61	1-2, 4-15, 17-19, 21
Y	US 2671469 A (Carnahan) 9 March 1954	3, 16, 20
X	Especially figure 1	1-2, 4-15, 17-19, 21
Y		3, 16, 20

Further documents are listed in the continuation of Box C

See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
7 December 2004

Date of mailing of the international search report  
15 DEC 2004

Name and mailing address of the ISA/AU  
AUSTRALIAN PATENT OFFICE  
PO BOX 200, WODEN ACT 2606, AUSTRALIA  
E-mail address: pct@ipaaustralia.gov.au  
Facsimile No. (02) 6285 3929

Authorized officer  
  
DAVID LEE  
Telephone No : (02) 6283 2107

for AS

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001304

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5551466 A (De PIERI) 3 September 1996 Especially figure 3-5, column 4, lines 46-61	1-2, 4-9, 13-15, 17-19, 21
Y	US 5836346 A (NICHOLS-ROY) 17 November 1998 See figure 2-3	3, 16
Y	GB 742391 A (CARMALT) 30 December 1955 See figures	20
A	US 1279468 A (SMITH) 17 September 1918 Whole document, especially figure 2	

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2004/001304

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member					
US	3970101						
US	2766769						
US	2671469						
US	5551466	AU	72899/94	BR	9403775	CA	2132139
		CN	1106115	EP	0645570	FI	944130
		IL	111010	IN	181895	JP	7174250
		NO	943351	NZ	264463	PH	30643
		SG	46220	TR	28565	ZA	9407250
US	5836346	AU	46464/97	CA	2266952	EP	0929722
		US	5715859	US	5975125	US	6003541
		US	6142174	WO	9814669		
GB	742391						
US	1279468						
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.							
END OF ANNEX							